

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1 to 15 (Cancelled)

16. (Currently Amended) A method for receiving signals transmitted in frequency bands of a receive frequency band of a cellular mobile communication system, the method comprising:

obtaining a first signal frequency band containing the signals by adding a carrier frequency to the receive frequency band and by pre-filtering the receive frequency band;

generating a frequency baseband containing the signals by adding an intermediate frequency to the first signal frequency band and by demodulating the first signal frequency band;

performing post-filtering on the frequency baseband to obtain a second signal frequency band containing the signals, wherein post-filtering is performed by a post-filter having a cut-off frequency that is variable and that is matched to one or more of the carrier frequency and the intermediate frequency in order to separate the second signal frequency band from a neighboring frequency band;

digitizing information in the second frequency band to obtain digitized information;

fine-filtering the digitized information to obtain the signals in digital form; and

amplifying signals of the second signal frequency band or bypassing amplifying the signals of the second signal frequency band based on a post-filter output level of the signals.

17. (Previously Presented) The method of claim 16, wherein the post-filter comprises one or more of a low-pass filter, a high-pass filter, and a high-pass/low-pass filter combination.

18. (Previously Presented) The method of claim 16, wherein amplifying comprises amplifying the second signal frequency band after post-filtering has been at least partially performed.

19. (Previously Presented) The method of claim 16, further comprising:
setting the carrier frequency to split off a neighboring frequency band of the second frequency band during prefiltering.

20. (Previously Presented) The method of claim 16, further comprising:
digitizing the first signal frequency band, wherein the frequency baseband is generated through digital demodulation.

21. (Previously Presented) The method of claim 16, further comprising:
performing one of a high-pass filtering and a combination of high-pass and low-pass filtering to filter out at least one subfrequency band in a range of the frequency baseband;
digitizing the at least one subfrequency band to produce a digitized subfrequency band;
and

converting the digitized subfrequency band into a frequency range which contains a zero frequency value.

22. (Previously Presented) A receiver for receiving signals transmitted in frequency bands of a receive frequency band of a cellular mobile communication system, comprising:

a first oscillator to insert a carrier frequency into a receive path of the receive frequency band;

a prefilter to filter a first frequency band containing the signals out of the receive frequency band with the carrier frequency;

a second oscillator to insert an intermediate frequency into a first signal path of the first frequency band;

a demodulator to demodulate the first frequency band with the intermediate frequency to generate a frequency baseband containing the signals;

a post-filter to obtain a second signal frequency band containing the signals from the frequency baseband, wherein the post-filter has a cut-off frequency that is variable, and wherein post-filter obtains the second signal frequency band by matching the cut-off frequency to one or more of the carrier frequency and the intermediate frequency in order to separate the second signal frequency band from a neighboring frequency band;

a second signal band amplifier to amplify a second frequency band; and

a bypass connected in parallel with the second signal band amplifier for forwarding a non-amplified version of the second frequency band;

wherein the bypass is used based on a post-filter output level of the signals.

23. (Previously Presented) The receiver of claim 22, wherein the post-filter includes one of a low-pass filter, a high-pass filter and a high-pass/low-pass filter combination, the cut-off frequency separating the second frequency band from neighboring frequency bands.

24. (Previously Presented) The receiver of claim 28, wherein:
the second signal band amplifier and at least a part of the post-filter are arranged in a common integrated circuit.

25. (Cancelled)

26. (Previously Presented) The receiver of claim 22, wherein:
the demodulator and at least a part of the post-filter are arranged in a common integrated circuit.

27. (Previously Presented) The receiver of claim 22, further comprising:
an analog/digital converter.

28. (Previously Presented) The receiver of claim 22, wherein the post-filter includes:

a common frequency and post-filter control to match one of the carrier frequency and the intermediate frequency to the cut-off frequency;

an analog/digital converter to digitize information in the second frequency band; and

a digital filter to filter the signals out of the digitized information.